

**ENVIRONMENTAL ASSESSMENT
LAS VEGAS FIELD OFFICE**

ENVIRONMENTAL ASSESSMENT

EA Number: NV-050-2002-135

Serial/Case File #: N-65898, N-65910, N-65924, N-65926, N-66696, N-66702, N-75201 through N-75203, N-75342, N-75773 through N-75811, N-75826, N-76043 through N-76045

1.0 Proposed Action Title/Type

Competitive Sale: The Bureau of Land Management (BLM) proposes to hold a competitive sale of federal public land in the Las Vegas Valley pursuant to the Southern Nevada Public Land Management Act of 1998, Public Law 105-263, 112 Stat 2343 (SNPLMA). The land consists of 50 parcels of various sizes totaling 1,172.50 acres (see Appendices 1 and 2 for legal descriptions and a map of locations) (hereinafter the *subject lands*).

The subject lands are proposed to be sold at public auction, and would be the tenth public auction of federal public land under SNPLMA. Interested parties will be allowed to submit sealed bids accompanied by 10% of the bid amount prior to the auction. Those declared highest bidders at the auction will submit 20% of their high bid by close of business the day of the auction. Final payment is due within 180 days of the auction. Any unsold parcels may continue to be offered for sale on the internet following the auction.

Direct Sale: The proposed action also includes a direct sale of three additional parcels, totaling 51.60 acres, to North Valley Enterprises. These parcels are within a nearly 2,000 acre parcel purchased from BLM by North Valley Enterprises at a previous SNPLMA public auction, and would not be part of the currently proposed public auction.

1.1 Location of Proposed Action

The sale consists of numerous parcels throughout the Las Vegas Valley. A detailed legal description of the subject lands is provided in Appendix 1, and parcel maps of the subject lands are included in Appendix 2.

1.2 Conformance with Applicable Land Use Plan

The subject lands are within the disposal boundary adopted by Congress in SNPLMA, and have been identified as suitable for disposal in the Las Vegas Resource Management Plan/Final Environmental Impact Statement, approved in October, 1998 (RMP) (see the Record of Decision, Lands Decision LD-1, page 18 of Appendix A) (a copy of the RMP is available for review at the BLM Las Vegas Field Office, 4701 N. Torrey Pines Dr., Las Vegas).

This environmental assessment tiers to the RMP, and incorporates relevant sections of the RMP where appropriate. BLM has used the most current information available to complete this analysis of the proposed action.

1.3 Need for Proposed Action

Public lands for meeting demand through orderly disposal of federal public lands.

Las Vegas metropolitan area is one of the fastest growing urban areas in the United States. (SNPLMA Section 2(a)(3)). BLM administers extensive federal public land in small and large parcels interspersed with or adjacent to private land in the Las Vegas Valley. (SNPLMA Section 2(a)(1)). Many of these parcels are difficult to manage and more appropriate for disposal. (SNPLMA Section 2(a)(1)). Therefore, Congress authorized BLM to dispose of lands within the SNPLMA boundary adopted by Congress.

Under Section 4(d) of SNPLMA, the appropriate local Las Vegas government jointly selects, with the Secretary of Interior, federal public lands within the SNPLMA disposal boundary to be offered for sale. Joint selection is required under SNPLMA in order that public land disposals made under SNPLMA are consistent with local land use planning and zoning requirements and recommendations.

The subject lands were selected by the City of Las Vegas and Clark County as lands to be offered for sale at public auction by BLM. This process involves months of cooperative efforts between BLM and these local governments.

As required by SNPLMA, portions of the proceeds from the sale of the subject lands will be used by the State of Nevada for its general education program (5%), by the Southern Nevada Water Authority for water treatment and transmission facility infrastructure in Clark County (10%), and by BLM 85% into a special account for purposes which include, the acquisition of environmentally sensitive lands in Nevada. (SNPLMA Section 4(e)).

1.4 Relationship to Statutes, Regulations and Agency Jurisdiction

The proposed auction is specifically authorized by SNPLMA. SNPLMA is administered by the Secretary of Interior through BLM. A complete review was performed by BLM staff of the RMP, pursuant to 43 C.F.R. 1610.5-3, and other public land laws and regulations administered by BLM to determine if the proposed action conforms with those requirements. No inconsistencies were identified based on this complete review.

Public land sales are regulated by 43 C.F.R. Part 2700, which details the procedures for disposal of public land by competitive and direct sale under the Federal Land Management and Policy Act, 43 U.S.C. 1701 *et seq.* (FLPMA). BLM follows these regulatory procedures when conducting sales under SNPLMA (see Appendix 3, BLM's program guidance memorandum). The proposed action will conform with applicable authorities and procedures under SNPLMA, FLPMA and 43 C.F.R. Part 2700.

2.0 Description of Proposed Action

BLM is proposing to sale by public auction 53 parcels, totaling approximately 1,224.10 acres, of

which 51.60 would be by direct sale (see Appendices 1 and 2 for legal descriptions and a map of locations), pursuant to SNPLMA. The parcels are interspersed throughout the Las Vegas Valley. The proposed public auction date would be November 15, 2002, at the Clark County Commissioners Chambers. All members of the public will be invited to attend. Bidders must be qualified conveyees under 43 C.F.R. 2711.2. Any qualified bidder may purchase the land and use it lawfully in the future. Any future lawful use and/or development of the subject lands may occur in the future only according to local land use planning and zoning laws and regulations.

BLM will not know who the successful purchasers of the property will be, nor will BLM have any knowledge of future proposed uses and/or development, if any, on the subject lands. However, BLM has used the most current information available to reasonably predict development scenarios (apartments, homes, office buildings or moderately sized casinos) for the subject lands, and has disclosed the impacts to air quality and/or water use based on these types of development in the RMP and this EA.

2.1 No Action Alternative

The subject lands would remain as federal public lands under the no action alternative, and be subject to all applicable public land laws and regulations, including if applicable mining and recreation.

3.0 Affected Environment

A. Threatened and Endangered Species

The only federally listed species known to occur within the proposed action area is the desert tortoise, an herbivorous reptile of the Mojave and Sonoran Deserts. In August 1989 the U.S. Fish and Wildlife Service published an emergency rule listing the Mojave population of the desert tortoise as endangered. In April 1990, after an existing data review, the Service determined the Mojave population of the desert tortoise to be threatened.

B. Migratory Bird Treaty Act

The subject lands potentially provide breeding habitat for several species of migratory birds. Under the Migratory Bird Treaty Act of 1918, 16 U.S.C. 703-711, it is deemed unlawful to take, kill, or possess migratory birds. A list of those protected birds can be found at 50 C.F.R 10.13. The subject lands are all within the Las Vegas Valley. Breeding habitat for migratory birds in the Las Vegas Valley has been degraded to varying degrees due to fragmentation. Breeding habitat for migratory birds still exists outside of the Valley and through efforts in effect to protect critical desert tortoise habitat such as the establishment of Areas of Critical Environmental Concern, species that also utilize similar vegetative associations will be afforded some protective provisions.

C. Wildlife

The quality of wildlife habitat that exists within the subject lands has been degraded to varying degrees through fragmentation, and increased human use originating from developed areas surrounding the parcels. As a result, the low numbers of wildlife individuals that the subject lands may currently support is not likely to represent the majority of the populations and will result in a minimal contribution to population decline. Furthermore, through implementation of the conservation measures identified in the Clark County Multiple Species Habitat Conservation Plan for habitat protection and management of listed and sensitive species, most of the unlisted wildlife and plants that also occur within those areas will be protected.

D. Air Resources

The Las Vegas Valley is in attainment with National Ambient Air Quality Standards for the following pollutants: Sulfur dioxide (SO₂); Ozone (O₃); nitrogen oxides (Nox); and Particulate Matter under 2.5 microns (PM_{2.5}).

The Las Vegas Valley is in non-attainment for Particulate Matter under 10 microns (PM₁₀) and Carbon Monoxide (CO). BLM is actively working with the Clark County Department of Air Quality Management (CCDAQM) to stabilize BLM vacant parcels that have been disturbed by unauthorized activities in the Las Vegas Valley.

Clark County has two State Implementation Plans (SIPs) deemed complete by the U.S. Environmental Protection Agency (EPA), but which have not been formally approved, for carbon monoxide (CO), and for Particulate Matter of 10 microns (PM₁₀).

Section 176(c) of the Clean Air Act, 42 U.S.C. 7401, *et seq.* and air quality regulations under 40 C.F.R. Part 51, Subpart W, with respect to the conformity of general federal actions to the applicable SIP apply to projects within non-attainment areas. Under the federal air quality laws, no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.[@] Under CAA 176 (c) and 40 CFR Part 51 Subpart W, a Federal agency must make a determination that a Federal action conforms to the applicable implementation plan before the action is taken.

Land sales are exempt from air conformity determinations at 40 C.F.R. 51.853 (c)(2)(xiv), which states:

The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:

(xiv) Transfers of ownership, interests, and titles in land, facilities and real and personal properties, regardless of the form or method of the transfer.

i. PM10 Emissions Inventory

The PM10 SIP for Clark County, dated June 7, 2001, provides the most up to date inventories of emissions for PM10. The SIP specifically identifies the attainment demonstration area as the BLM Disposal Area. Two sets of inventories were completed, one for the entire non-attainment area and another for the attainment demonstration area. The following is a summary of the major categories and the percentage of the total emissions attributed to that category.

ii. Attainment Demonstration Area Emissions Inventory

Total emissions for PM10 were calculated at 171,755 tons per year. The PM10 emissions for each major category are as follows: Construction 23%, Vacant Lands 39%, Paved Road Dust 26%, Unpaved Road Dust 9%, with 1% each for Mobile, Point and Area sources.

The PM10 SIP on page 3-22 provides an estimate of the emission reduction projected based on various control measures and regulations for enforcement of standards for the year 2001, of 170,625 tons/year. This is a reduction of 1,130 tons/year.

iii. Entire Basin 212 Non-attainment Area Emissions Inventory

Total current emissions for PM10 were calculated at 333,132.7 tons per year. The inventory provided categories for grouping emissions. The emissions attributed to each category are as follows: 66% from wind erosion of vacant lands, 20% from paved and unpaved road dust, 10 % from construction and wind erosion, with 4% from all other minor sources combined.

iv. Carbon Monoxide Emissions Inventory

The most recent projections for CO inventories are within the SIP submitted to EPA for approval. The CO SIP Clark County(1996) identifies 174,882 tons per year based on 479.13 tons per day, emitted from a number of stationary as well as mobile sources. The emissions projected for 2000 were estimated at 141,310 tons/year. This decrease is based on use of oxygenated fuels and vehicles that burn fuels with little to no CO emissions. Potential increases in CO emissions are presented in the environmental impacts section below, based on various potential residential and commercial development possibilities.

Graphs on page 2-7 for the Clark County the CO SIP (August 2000) show a history of exceedence days for CO. During the period 1981 to 1991 the number of exceedence days ranged from 6 in 1991 to a high of 41 in 1985. Since 1981, the trend is a decrease in exceedence days. From 1999 to the present there has not been an exceedence recorded in the Las Vegas Valley. Once EPA approves the SIP, Clark County can request the Las Vegas Valley be downgraded from a serious non-attainment area to a maintenance area. The Las Vegas Valley has not experienced an exceedance for CO in over 3 2 years. This is consistent with EPAs trends analysis for a general reduction in the

CO levels throughout the United States. This is attributed to newer vehicles that burn fuels more efficiently.

v. Ozone Inventory:

Ozone monitoring has been in effect since 1999. The fourth high 8 hour rolling average of the last three years has not been exceeded, to date. The levels are however, very close to the 3 year average standard of .085 PPM, with readings from a low of .065 at City Center to a high of .081 at the Joe Neal site.

vi. Other Criteria Pollutant Emissions

The description of impacts section of this document identifies potential emissions of other pollutants as well as CO and PM10, including, NOx, SO2, VOC, and PM2.5. The existing baseline data was provided by CCDAQ and is available and summarized in Appendix 4. At this point in time all of the other pollutants noted in this EA fall under the national standards, and are therefore considered to be in attainment.

vii. Desert Research Institute Study

A recent study completed by the Desert Research Institute has identified overall anywhere from 45 to 75 percent of the haze in the Las Vegas Valley comes from local sources. The remaining haze is from other outside sources. This can be determined by an analysis of filters used to trap particles. Therefore, knowing this fact provides additional focus on the sources of emissions in the Las Vegas Valley, which are the only emissions sources where control measures can be effective.

viii. Potential Health Effects of CO, PM10 and Ozone

CO can reduce oxygen delivery to the body's organs and tissue. The greatest threat is to those who suffer from cardiovascular disease. However, healthy people are also affected, but only at higher levels of exposure. Exposure to higher levels of CO is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability and difficulty in performing complex tasks.

PM10 has been linked to a number of health effects including, aggravated asthma, increases in respiratory symptoms like coughing, and difficult or painful breathing, chronic bronchitis and decreased lung function.

Ozone even at low levels can adversely affect everyone. The major health concern about higher ozone levels includes, airway inflammation, wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities. Even at very low levels, ground level ozone aggravates asthma, reduces lung capacity, and increases the susceptibility to respiratory illnesses like pneumonia and bronchitis. The Las Vegas Valley has not been designated as a non-

attainment area for ozone.

E. Water Resources

The Nevada State Engineer is responsible for allocating water supplies to individual uses, provided water is available for appropriation. The Las Vegas Valley has experienced rapid growth and development over the last twenty years, placing heavy demands on limited water resources. Historically, groundwater was used to meet water demands. By the mid-1940-s, concerns were raised about limited water supplies and declining groundwater levels. The Las Vegas Valley hydrographic basin began to be over drafted, with more groundwater extracted than was naturally recharged. This resulted in declining groundwater levels, land subsidence, declining water quality from incursion of water with higher concentrations of dissolved solids and nitrate, and the loss of vegetation dependent on groundwater (Morgan and Dettinger, 1994).

Of particular concern is land subsidence, because of the damage potential for property. In the Las Vegas Valley, subsidence is primarily associated with excessive pumping of groundwater and the resultant water level declines. As groundwater is extracted, pressure is reduced between grains in subsurface sediments. The grains become compacted, reducing their volume. This sedimentary compaction is seen on the land surface as subsidence. It is most common in areas containing fine-grained deposits (silt and clay). Since 1935, this compaction has resulted in nearly 6 feet of subsidence (Pavelko et al., 1999).

The Las Vegas Valley Water District (LVVWD) and the City of North Las Vegas initiated an artificial recharge program in 1987. This program artificially recharges unused Colorado River water during low demand periods in the winter into the primary Las Vegas Valley groundwater aquifer via injection wells. Through the end of 2001, about 246,000 acre-feet have been recharged (LVVWD, 2002).

The primary water supply for the Las Vegas Valley is Nevada-s Colorado River water entitlement, which is approximately 330,000 acre-feet per year, but groundwater is still used to meet about 15 percent of the Valley-s water demands (Southern Nevada Water Authority (SNWA), 2002). Since 1990, an average of 71,000 acre-feet per year (afy) of groundwater has been pumped from the Las Vegas Valley. An average of 21,000 afy has been recharged, resulting in an average net pumpage of about 50,000 afy (Coache, 2001). Older estimates of the natural recharge or Aperennial yield® for the Las Vegas Valley were about 30,000 afy (Malmberg, 1965; Maxey and Jameson, 1948), but current estimates indicate the natural recharge is 57,000 afy (Donovan and Katzer, 2000).

Since the recharge program was initiated, water levels have risen as much as 100 feet in the central part of the Valley (LVVWD, 2002). The rate of subsidence has decreased. In those areas where the water level rises, subsidence has dramatically lessened or ceased (Bell et al., 2001).

There are over 5,000 domestic wells in the Las Vegas groundwater basin (Coache, 2001). A domestic well provides water to a single-family residence. There are also about 1,200 private

permitted wells (wells with specific groundwater rights), and about 100 municipal permitted wells (SNWA, 2002). In particular for the municipal water purveyors, these wells help meet peak water demands during the summer. To better manage this limited groundwater resource, under state legislation passed in 1997 and 1999 (Nevada Revised Statutes, Chapters 349, 533, 534, and 572), the Southern Nevada Water Authority oversees a groundwater management program to protect the Las Vegas Valley groundwater basin from overdrafting and potential sources of contamination.

F. Cultural Resource Management

Section 106 of the National Historic Preservation Act of 1966 requires that Federal agencies take into account the effects of their undertakings on historic properties. Efforts to identify and evaluate cultural resource properties for this project according to 36 CFR 800.4 are described in Las Vegas District Class I Cultural Resource Report 5-2121, Justification Proposal to Limit Archaeological Survey on BLM Lands in Las Vegas Valley, Southern Nevada, by Keith Myhrer, BLM Archaeologist, April, 1991. The existing data review, Cultural Resource Report 5-1990, A Review of Fifteen Years of CRM on BLM Land in Southern Nevada, August, 1990, provided documentation that a relatively large number of inventories, where few sites were identified, had been previously conducted within the Las Vegas Valley. The results of the surveys indicate that with the exception of four identified sensitive subzones, the lands within Las Vegas Valley are considered to be of very low sensitivity for the presence of cultural resources eligible for nomination to the National Register of Historic Places.

CR 5-2121 also provided a recommendation to exempt additional field inventory for Federal actions outside the sensitive subzones with project area less than 200 acres in size. The State Historic Preservation Office (SHPO) concurred with this proposal in a letter, dated May 15, 1991. CR5-2121 was amended to reflect the Las Vegas RMP disposal boundary.

The Las Vegas Valley is unique in the realm of Cultural Resource Management in the sense that a relatively large amount of acreage has been inventoried within its parameters. One result of the numerous cultural resource studies completed, is the identification of areas or subzones of low and high sensitivity. Cultural Resources Report 5-2121, as amended in 1996 with SHPO concurrence in a letter dated August 8, 1996, provides a rationale to limit the amount of acreage surveyed for Federal actions on BLM lands in the Las Vegas Valley located outside the sensitive subzones, areas rated high in sensitivity. For projects over 200 acres in size a 20 percent sample inventory is employed, at Class II standards, depending on the size and type of the project area as determined by the BLM archaeologist in consultation with the SHPO. The size and location of the project area for this sale does not meet the criteria for Section 106 exemption outlined in CR5-2121. Therefore, an existing data review must be completed to determine if additional Class III inventory is required. The subject lands are not within any archaeologically sensitive subzone.

Cultural Resources Report CR5-2121 is used by BLM as guidance to ensure that BLM meets all requirements of the National Historic Preservation Act of 1966. Any additional cultural resource inventory completed will include the required consultation and concurrence with SHPO.

G. Hazardous Materials

"Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 *et seq.* (CERCLA), and its implementing regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6901, *et seq.*, and its implementing regulations. The term hazardous materials also includes any nuclear byproduct material as defined by the Atomic Energy Act of 1954, 42 U.S.C. 2011, *et seq.*

4.0 Environmental Impacts of the Proposed Action

A. Summary

Critical Element	Affected	Critical Element	Affected
Air Quality	Yes	T & E Species	Yes
ACECs	No	Wastes, Hazard/Solid	No
Cultural Resources	No	Water Quality	No
Farmlands, Prime/Unique	No	Wetlands/Riparian Zones	No
Floodplains	No	Wild & Scenic Rivers	No
Environmental Justice	No	Noxious Weeds	No
Native American Religious Concerns	No	Wilderness	No

B. Description of Impacts for the Proposed Action

Due to the general uncertainty of whether all of the subject lands will actually sell at auction, and of not knowing any actual development proposals that may occur on any lands sold, BLM has considered several development scenarios and the impacts of those developments to the environment. BLM has not relied on current zoning for this analysis because zoning for the subject lands is likely to change at any time by the appropriate local zoning authority. However, BLM has analyzed a range of development scenarios from apartment complexes to moderately sized hotel casinos in order to complete an impacts analysis that will provide the authorizing officer enough information to make a reasoned choice, prior to making a final decision, in the face of all of the uncertainties.

C. Threatened and Endangered Species

This project is located within the Las Vegas Valley Programmatic Section 7 Area, outside the exclusionary zone, and is covered by Biological Opinion, File No. 1-5-96-F-23R.2 (October, 2001). The Opinion identifies tortoise populations in the Las Vegas Valley are isolated from high quality habitat and contiguous high-density habitat and, because of habitat fragmentation, from each other. Tortoise habitat in the Las Vegas Valley continues to be fragmented and degraded due to development and urbanization. This urbanization has already decoupled tortoise habitat north and south of Las Vegas, which resulted in closing any opportunity to provide a corridor on the west side of the valley. Consequently, the U.S. Fish and Wildlife Service (the Service) issued the above Biological Opinion authorizing take of 125,000 acres of habitat within the Las Vegas Valley. It was the Service's determination that the effects of disposal of up to 125,000 acres within the Las Vegas Valley would not appreciably reduce the likelihood of survival and recovery of the Mojave population of the desert tortoise in the wild. Land sales within the Las Vegas Valley comply with this Biological Opinion without further on-the-ground surveys.

D. Wildlife

Impacts resulting from sale of the subject lands may include loss of habitat features such as cover and forage and loss or displacement of individuals, through development. Highly mobile species such as birds, jackrabbits, and coyote are less likely to be lost. In contrast, less mobile species such as reptiles, small mammals, and desert kit fox are more likely to be injured or killed during construction activities.

E. Air Quality

i. Land Sales Air Pollutant Emissions Inventory

The emissions calculations include: vehicle miles traveled; vehicle exhaust; vehicle road dust; natural gas use (hot water and furnace); electricity use (from the Reid Gardner Power Plant); and developed property fugitive dust. Construction emissions are not included because there is no widely accepted standard emission factor, the impacts are temporary, not cumulative and not additive. The emission estimates projected in the following analysis are additive once the land is developed. The analysis shows an overall decrease in PM10 emissions.

For comparison, the Las Vegas RMP assumes the following annual air pollutant emissions for:

CO = 1.37 T/acre, PM10 = 0.19 T/acre

ii. Current Vacant Land

The values below assume current vacant lands are converted to the following land uses: a single family home; an apartment complex; an office building; a convenience store; a moderate casino/hotel; or a city park. The assumptions used to generate the emission factors are displayed in Appendix 4.

Air Pollutant Inventory Emission Factors

Criteria Pollutant	Single Family Home	Office Building	Convenience Store	Apartment Complex	Moderate Casino	City Park
CO	0.37 T/ac	0.29 T/ac	5.40 T/ac	1.37 T/ac	1.06 T/ac	0.01 T/ac
NOx	1.14 T/ac	0.86 T/ac	8.77 T/ac	4.35 T/ac	2.55 T/ac	0.02T/ac
SO2	0.08 T/ac	0.07T/ac	0.17 T/ac	0.32 T/ac	0.15 T/ac	<0.01 T/ac
VOC	0.23 T/ac	0.25 T/ac	6.82 T/ac	0.94 T/ac	1.05 T/ac	0.01 T/ac
PM10	0.44 T/ac	0.45 T/ac	8.27 T/ac	1.62 T/ac	1.50 T/ac	0.08 T/ac
PM2.5	0.16 T/ac	0.14T/ac	1.85 T/ac	0.54 T/ac	0.41 T/ac	0.03 T/ac

The Single Family Home, Apartment Complex and Moderate Casino/Hotel emissions are due mostly to a combination of vehicle and electric power use. All other land use emissions are dominated by vehicle use. The following impact assessment is based on data provided by Clark County Comprehensive Planning. It is reasonable to make assumptions as to the potential future developments on lands sold by BLM based on existing development near the parcels. It is also reasonable to make the assumption that for each land sale so many acres would go into single family homes, apartments, etc.

The following analysis is based on projections provided by Clark County Comprehensive Planning Department. The assumptions made in this analysis are derived from the Southwest Las Vegas Valley Public Facilities Needs Assessment Report, Jan 2, 2001. These are the best projections available to complete an analysis based on potential future development in the Las Vegas Valley. It is expected that out of the subject lands sold in this sale, 65% will be for single family homes, 15% for apartment complexes, 2% parks and open spaces, 2% convenience stores, 3% for 1, 40 acre casino, and 13% for other office buildings, which would include buildings needed for public facilities as well as general office buildings.

Based on the above percentages, for this sale BLM is going to assume that 795.67 acres for single family homes, 183.62 acres for apartments, 24.48 acres for parks and open spaces, 24.48 acres for convenience stores, 40 acres for 1 hotel casino and 155.85 acres for office buildings. There is no way to determine exactly how long it will take to develop all 1224.10 acres, so for this analysis we will use 5 years, which appears to be a reasonable estimate based on observations in the Las Vegas Valley.

The following table is a break down of criteria pollutant estimates for the entire subject lands. Lead is not included based on the Las Vegas Valley has no know lead contamination problems. The CCDAQM does not monitor lead levels based on no known lead concerns.

CRITERIA POLLUTANT EMISSION ESTIMATES FOR 1224.10 ACRE LAND SALE

Criteria Pollutant	Single Family Home 795.67 ac	Office Building 155.85 ac	Convenience Store 24.48 ac	Apartment Complex 183.62 ac	Moderate Casino 40 ac	City Park 24.48 ac	Totals*
CO	294.40	45.20	132.19	251.56	42.4	.24	765.99
NOx	907.06	134.03	214.69	789.75	102	.49	2,157.02
SO2	63.65	10.91	4.16	58.76	6	.24	143.72
VOC	183	38.96	166.95	172.03	42	.24	603.18
PM10	350.09	70.13	202.45	297.46	60	1.96	928.09
PM2.5	127.31	21.82	45.29	99.15	16.4	.73	310.70

*These emissions are for all acres. We estimate it will take 5 or more years before all the land is developed.

Therefore, the total tons per year of emissions for development of the land would be as follows: CO 153.26 tons/yr, NOx 431.40, SO2 28.74 tons/year, VOC 120.64 tons/yr, PM10 185.62 tons/yr and PM2.5 62.14 tons/yr.

The numbers projected for emissions are intended as estimates based on trends in development within the Las Vegas Valley. These estimates may or may not represent the final development that occurs on the lands, but these projections are reasonable based on past and future development proposed within the Las Vegas Valley. It is critical to note that before any land is developed, the private land owner will be required to coordinate with the Clark County Department of Air Quality Management to obtain permits prior to any ground disturbance caused by development.

iii. Emission Reduction Actions and Strategies

BLM has worked with Clark County to stabilize disturbed lands in the non-attainment area. In fact the BLM has reduced the emissions on approximately 450 acres of disturbed lands, as of 6/12/2002.

This has realized a decrease in PM10 emissions from BLM administered lands by about 720 tons (450 acres x 1.6 tons/acre = 720 tons). Nine parcels were jointly selected for this sale based on the existing emissions concerns. Additional parcels with air emission concerns will be offered in future sales.

The BLM has estimated based on, on-the-ground observations that of the 1,224.10 acres, 1% is stable, 55% is native and 44% is disturbed.

Disposal of lands within the Las Vegas Valley disposal area was analyzed in the RMP (BLM 1998), page 4-3, and are incorporated by reference. Based on an annual disposal rate of 1,277 acres, 243 tons per year of PM10, and 1,750 tons of CO could potentially be released, with no control measures applied. As noted in the EIS, these estimates were expected to be a little high. Based on the calculations above, the PM10 estimates were very close and the CO emissions were much higher most likely based on the fact that vehicles now release much lower levels of CO. All emission estimates for this land sale are within the emission estimates contained the RMP/FEIS.

It is worthy to compare the potential amount of PM10 emission reduction by development of lands in the Las Vegas Valley. This analysis is a general assessment of a range of emission reduction if lands are developed in the Las Vegas Valley. It would provide a good estimate for the major category sources such as disturbed vacant lands, native desert, stabilized vacant lands and construction dust. The amount of potential reduction depends highly on the source. For this general assessment, the average emissions in tons per acre will be used. It is recognized that this is an average number and that, the emissions would vary based on soil types and wind speeds. The assumption is made that none of the lands identified for sale are under construction, but are, disturbed vacant lands, native desert, or stabilized vacant lands. This analysis would be based on lands located in the disposal area.

The PM10 SIP for Clark County (June 2001) provides the most up to date information to complete this analysis. The emission factors were developed by University of Nevada Las Vegas (UNLV). Taking a very simple approach, we can identify an average tons per acre of PM10 emission from one acre of land for the major categories which can be tied to BLM activities. For disturbed vacant lands and unpaved parking lots the average $(48,500 \text{ divided by } 18,719) = 2.59 \text{ tons/ac/yr}$, with native desert $(14,500 \text{ divided by } 113,804) = .13 \text{ tons/ac/yr}$ and stabilized vacant land $(5,400 \text{ divided by } 54,666) = .99 \text{ tons/ac/yr}$. Therefore, the potential reduction in emissions by source identified for the disposal of the 1,224.10 acres is within the following projections: $(537.75 \times 2.59) = 1,392.77 \text{ tons/yr}$, $(13.75 \times .99 = 13.61) \text{ tons/yr}$ down to $(672.6 \times .13) = 87.44 \text{ tons/yr}$. This totals 1,493.82 tons/yr reduction in PM10, which would be reduced based on any expected minor increase in PM10 associated with development of the lands. It is clear there would be a decrease in PM10 provided the land is developed in the future.

Based on the above analysis it is clear the emissions of PM10 will be reduced once all the land is developed. There would be an increase in all other criteria pollutant emissions, as identified.

In an article printed in the Las Vegas Review Journal, written by Keith Rogers titled "A Valley's Hazy Air Originates Locally", he quotes two research scientists, Green and Hecobian that suggest one way to tackle the haze problem would be to develop land in the urban valley, where the vacant land is already disturbed. (see Appendix 6)

F. Soil

If the subject lands are developed, during the construction phase, the exposed soil surfaces are likely to result in wind erosion and soil losses or movement. Surface compaction is likely to result in

increased water runoff and an increase in water erosion. However, after a surface is prepared, erosion from wind can be reduced by applying water to the prepared surface. Therefore, dust emissions are a short term concern. In addition, completed developments will stabilize surfaces throughout the subject lands.

G. Water

The increase in water demand based on the sale and potential development of the land was analyzed in the RMP, at pages 4-9, and are incorporated in this EA by reference. The proposed action would privatize 1,224.10 acres. The following calculation does not take into account any return flow credits realized from treatment of the water and returning it to Lake Mead through the Las Vegas Wash. Therefore, BLM estimates that the proposed action may increase water demand by 3,060.25 acre feet a year. According to the Southern Nevada Water Authority, developed urban land uses 2.5 acre-feet per year for each acre developed.

H. Hazardous Material Assessment/Inspection

The public land recommended for transfer out of federal ownership via competitive sale and direct sale has been physically inspected and existing records have been examined in accordance with Section 120(h) of Superfund Amendment and Reauthorization Act. Unless noted otherwise, no evidence was found to indicate that any hazardous substance was stored for one year or more or disposed of or released on the property.

I. Cultural Resources

An existing data review/records search was conducted from July 1, 2002 to July 25, 2002, at the Las Vegas Field Office specifically targeting the 53 parcels being offered for sale. The parcels totaled 1,224.10 acres. Of this total, 1,119.10 acres were previously surveyed at Class III inventory levels in compliance with Section 106 of the National Historic Preservation Act of 1966. No eligible sites were noted on any of the parcels previously surveyed. (See survey documentation in Appendix 5)

None of the unsurveyed parcels are located in any of the four sub-zones of high archaeological sensitivity as identified in BLM Cultural Resource Report 5-2121. As a result of this investigation, the probability of locating eligible sites on the remaining 105 acres is negligible and an additional inventory was deemed not necessary.

4.1 No Action Alternative Impacts

Since the defined need for the proposal, privatizing federal land around Las Vegas and promoting orderly disposal which conforms to local land use requirements and policies, cannot be met if the no action alternative is chosen, we will analyze the impacts of not meeting the defined need for the proposal.

A substantial impact of not selling federal public land in the Las Vegas Valley is that the proceeds are

used in the State of Nevada for a number of purposes. If this source of funds were cut off, there would be far fewer or possibly no dollars to purchase environmentally sensitive lands in Nevada. Other impacts of this alternative include no land transferred to private ownership, which would result in maintaining the current tax base for local governments, thus reducing income from taxes levied on private holdings. Dollars currently being used to provide much needed maintenance of federal recreational facilities would be cut off and would potentially reduce the enjoyment of facilities to both local and outside visitors. This would, in effect, reduce the recreational experience for all visitors. The no action alternative would provide no monies to the State of Nevada for education under SNPLMA. As the population of the State of Nevada grows, there is a tremendous burden put on communities to provide quality education for the children. The dollars generated from the sale of lands in the Las Vegas Valley for education is important for the overall quality of the school system. Finally, the Southern Nevada Water Authority would need to find another funding source to help build the infrastructure for water delivery. It is entirely possible that taxes would need to be increased to meet the ever increasing needs for funds to build schools, provide good education for the children of Nevada and to ensure a dependable water supply is available to all those who live in the Las Vegas Valley.

The SNPLMA clearly defines the intent of Congress to provide lands in the Las Vegas Valley for community development. The no action alternative is contrary to the intent of Congress and would remove the ability of the local communities to identify lands they want for orderly disposal and community development in the Las Vegas Valley. Private and federally owned land would remain interspersed throughout the Valley.

It is possible that if BLM were to retain the subject lands in federal ownership, such retention would not help improve the air quality in the Las Vegas Valley. This is explained in the proposed action impact calculations of the amount of dust/PM10 reduction expected by developing vacant lands. We would not expect any increase in the other category pollutants if the public lands are not developed. We would expect an increase in disturbance of vacant public lands available for disposal in the Las Vegas Valley as the population increases because the lands are open to public use. There are many parcels of public land that Las Vegas residents use to recreate. These lands, once disturbed, emit much higher levels of PM10 than the stable vacant native desert lands in the Las Vegas Valley. The BLM is currently working with the Clark County Department of Air Quality Management to stabilize public land parcels identified as unstable by their enforcement officers.

4.2 Cumulative Impact Assessment

The geographic area for this cumulative impact analysis is defined as that portion of hydrographic basin 212 identified for attainment demonstration. This is the area where the vast majority of the community development will occur. The analysis completed in the Las Vegas RMP covered the entire 212 basin and is tiered to as noted below. BLM does not consider the sale of the subject lands as a growth inducing action, because Las Vegas is growing independent of any land BLM may sell at auction. However BLM has presented very detailed analysis in both the environmental consequences section and this cumulative impacts analysis.

A. Air

A cumulative impacts analysis was completed in the RMP on pages 4-53 to 4-55, which addressed both PM10 and CO increases over the next 20 years based on 25,540 acres of public land disposal and 54,000 acres of private land development over the same period and is tiered to and incorporated by reference. It is clear from the analysis that the use of best management practices and any new technology may be required to ensure SIP budgets are not exceeded. The BLM will work closely with the CCDAQM on any land disposal action within the non-attainment area.

EPA defines an action to have a regionally significant impact if air emissions will exceed 10% of the total regional emissions budget for a criteria pollutant. The regionally significant thresholds are 17,800 tons/yr for PM10 and 12,100 tons/yr for CO based on the total budgets identified in each SIP. Estimated emissions for the development of 4800 acres of land are 3,838 tons of PM10 and 2,993 tons of CO, well below the 10% threshold set by EPA. Therefore, impacts from BLM actions are unlikely to become regionally significant.

This analysis will reference the 1998 PM10 emission inventory and the projected 2001 emissions inventory, because it is the best available information to use. The emission inventories show a 1,130 tons/year reduction in overall PM10 emissions, with a decrease in stationary sources, increases in non-road mobile sources and on-road and a static for stationary point sources.

The emissions estimated for PM10 and CO for this sale fall well within the projected increases disclosed in the RMP. The detailed analysis for PM10 emissions for this land sale actually showed a decrease in the amount of PM10 emitted from public lands once development is completed. The following table provides reasonable projections of emissions of criteria pollutant based on the development scenario for the proposed action.

**CRITERIA POLLUTANT EMISSION ESTIMATES IN TONS/YEAR
FOR DEVELOPMENT OF 4800 ACRES IN ONE YEAR**

Criteria Pollutant	Single Family Home 65% 3120 ac	Office Building 624 ac	Convenience Store 2% 96 ac	Apartment Complex 15% 720 ac	Moderate Casino 3% 144 ac	City Park 96 ac 2%	Totals 4,800 ac
CO	1154	181	518	986	153	1	2,993
NOx	3,557	537	842	3,132	367	2	8,437
SO2	250	44	16	230	22	1	536
VOC	718	156	655	677	151	1	2,358
PM10	1,373	281	794	1,166	216	8	3,838
PM2.5	499	87	178	389	59	3	1,215

A basic assumption is made for this analysis of potential reduction in PM10 emissions based on surface stability of any lands developed. The figures presented in the PM10 SIP inventory completed by Clark County are: 10% stabilized, 29% disturbed and 61% stable native desert and will be used for this analysis. We realize these numbers will vary based on the actual surface condition of each parcel, however it is reasonable to use these numbers to project emissions over time. Currently, there is no meaningful way to determine the actual surface stability of future sale parcels until the EA for each sale is prepared.

Therefore, for the 4,800 acres projected to be developed each year, the assumption is made that 480 acres would be stabilized, 1,392 acres disturbed and 2,928 acres native stable desert. As stated in the affected environment, the factors used to determine potential reduction in dust emissions based on land development are again as follows: disturbed vacant lands and unpaved parking lots the average $(48,500 \text{ divided by } 18,719) = 2.59 \text{ tons/ac/yr}$, with native desert $(14,500 \text{ divided by } 113,804) = .13 \text{ tons/ac/yr}$ and stabilized vacant land $(5,400 \text{ divided by } 54,666) = .99 \text{ tons/ac/yr}$. The potential reduction in PM10 each year could be $2,928 \times .13 = 381 \text{ tons}$, $1,392 \times 2.59 = 3,605 \text{ tons}$, and $480 \times .99 = 475 \text{ tons}$, totaling 4,461 tons of potential reduction in PM10 per year. Taking into account development will lead to the emissions identified in the table immediately above, the total reduction in emissions is $4,461 - 3,838 = 623 \text{ tons of PM10 per year}$. For all other pollutants shown in the table, there would be an increase each year land is developed as noted.

One emission source within the Las Vegas Valley that occurs on BLM managed lands are 4 gravel pits. BLM estimates a release in PM10 emissions of approximately 209 tons/yr. This is based on 1/3 of the total emissions being attributed to gravel pits that are managed by BLM. The SIP identifies 627 total tons/ac for all gravel pits in the Las Vegas Valley. This source of PM10 emissions is consider constant and most likely will not change. If there is a change it would be less than 1% even with a 100 tons/year increase. However, this is not expected to happen in the reasonably foreseeable future.

All other criteria pollutants fall within acceptable limits and the Las Vegas Valley is in attainment for each of these pollutants. The proposed action together with all other reasonably foreseeable actions will not cause an exceedance for any of the other criteria pollutants for which the Las Vegas Valley is in attainment.

B. Water

A cumulative impacts analysis was completed in the RMP on pages 4-55 to 4-56, which addressed the increased water demand expected based on development of 54,000 acres of private land and 26,000 acres of currently Federal which would be subsequently developed when privatized. Over a 20 year period it is expected that an additional 200,000 acre feet of water may be required to meet future demands for water. It is clear from the analysis that additional water allocations would be needed to sustain growth. The Southern Nevada Water Authority is in the process of completing a water and treatment facility, with an extensive pipeline network, which would nearly double the existing

pumping and delivery potential. They are also working with the Secretary of the Interior to acquire additional water rights from Lake Mead to meet projected future needs.

All projections for water use which may result from the sale of the subject lands fall within the estimates presented in the RMP.

4.3 Description of Mitigation Measures and Residual Impacts

Under the Biological Opinion no mitigation fee is collected upon the sale of this land. The fees will be collected prior to development in accordance with the Clark County Multi-Species Habitat Conservation Plan.

Residual impacts to air quality include a short term increase in dust emissions from construction phases of any development of the land, and vehicle activity. In addition an increase in hydrocarbon and combustion emissions from internal combustion engines would be expected in the project area.

No long term residual adverse effects on Air Resources are expected from the proposed action. The impacts are expected to occur during development of the land sold. Once developed, the dust emissions would be minimal to none for the entire project area and a slight increase in hydrocarbons would be expected due to additional combustion engine vehicles continually being operated in the area, during and after construction. However, new technology for combustion engines has reduced the CO emission, which results in a minimal increase in CO.

The land purchaser will be required to take measures to control fugitive dust, in compliance with the Clark County Department of Air Quality Management permitting regulations.

4.4 Recommendation and Rationale

Recommendation:

It is recommended that the subject lands be offered for sale to the general public by auction under the authority of SNPLMA, FLPMA, and any other applicable law or regulation.

The patent, when issued, will contain the following reservations to the United States:

1. A reservation of all leaseable and saleable mineral deposits in the land so patented, and to it, its permittees, licensees and lessees, the right to prospect for, mine, and remove the minerals owned by the United States under applicable law and such regulations as the Secretary of the Interior may prescribe, including all necessary access and exit rights.
2. A right-of-way thereon for ditches and canals constructed by the authority of the United States, Act of August 30, 1890, 26 Stat. 391, 43 U.S.C. 945.
3. All land parcels are subject to all valid and existing rights.
4. All land parcels are subject to reservations for roads, public utilities

and flood control purposes, both existing and proposed, in accordance with the local governing entities= Transportation Plans.

5. All purchasers/patentees, by accepting a patent, agree to indemnify, defend, and hold the United States harmless from any costs, damages, claims, causes of action, penalties, fines, liabilities, and judgements of any kind or nature arising from the past, present, and future acts or omissions of the patentee or their employees, agents, contractors, or lessees, or any third-party, arising out of, or in connection with, the patentees use, occupancy, or operations on the patented real property. This indemnification and hold harmless agreement includes, but is not limited to, acts and omissions of the patentee and their employees, agents, contractors, or lessees, or any third party, arising out of or in connection with the use and/or occupancy of the patented real property which has already resulted or does hereafter result in: (1) Violations of federal, state, and local laws and regulations that are now, or may in the future become, applicable to the real property; (2) Judgements, claims or demands of any kind assessed against the United States; (3) Costs, expenses, or damages of any kind incurred by the United States; (4) Other releases or threatened releases of solid or hazardous waste(s) and/or hazardous substances(s), as defined by federal or state environmental laws; off, on, into or under land, property and other interests of the United States; (5) Other activities by which solids or hazardous substances or wastes, as defined by federal and state environmental laws are generated, released, stored, used or otherwise disposed of on the patented real property, and any cleanup response, remedial action, or other actions related in any manner to said solid or hazardous substances or wastes; or (6) Natural resource damages as defined by federal and state law. This covenant shall be construed as running with the patented real property and may be enforced by the United States in a court of competent jurisdiction.

Rationale:

1. The land is physically suitable or adaptable for the use and purpose requested (43 CFR 2410.1(a)).
2. Lands found to be valuable for public purposes will be considered chiefly valuable for public purposes (43 CFR 2430.2(b)).
3. The recommendation to dispose of the subject lands is consistent with the RMP, SNPLMA, FLPMA, and all other applicable federal public land laws and regulations.
4. Road reservations are in accordance with the governing entity=s Transportation Plans.

5.0 Persons/Agencies Consulted:

Kristen Murphy, Biologist, Division of Resources - Las Vegas Field Office
Stan Rolf, Archaeologist, Division of Resources - Las Vegas Field Office
Rebecca Lange, Non-Renewable Resources - Las Vegas Field Office
Clark County Department of Air Quality Management
Clark County Comprehensive Planning
Clark County Public Works
Nevada Power Company
Southwest Gas Corporation
Scott Archer, Air Quality Specialist, BLM, Denver

6.0 References:

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Pavelko, Michael T., David B. Wood, and Randell J. Laczniaik, 1999. *Las Vegas, Nevada; Gambling with Water in the Desert*, in Galloway, Devin, David R. Jones, and S.E. Ingebritsen, eds., *Land Subsidence in the United States*. U.S. Geological Survey Circular 1182, pp. 49-64.

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FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD

Decision: It is my decision to authorize the sale 45 parcels consisting of approximately 1,147.50 acres by public auction, on November 15, 2002. Approximately 35.63 acres consisting of two parcels, will be offered to North Valley Enterprises. Five parcels were pulled from the auction at the request of Clark County and 1 parcel was pulled from the direct sale at the request of the Clark County School District. Mitigation measures identified for the proposed action in the attached environmental assessment will be formulated into stipulations of the patent where applicable. This decision incorporates by reference all stipulations identified in the environmental assessment.

FONSI: I have reviewed this environmental assessment (EA) including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action with the mitigation measures as described will not have any significant impacts on the human environment and that an EIS is not required. It is my decision to proceed with the public land sale and ensure the mitigation measures identified below and those contained in the attached EA are followed.

Rationale for the Decision: The decision to proceed with the public land sale does not result in any undue or unnecessary environmental degradation. I have determined that the proposed action is in conformance with the 1998 RMP, SNPLMA, FLPMA, and other applicable federal public land laws and regulations.

Sales are exempt from air conformity determinations 40 CFR 93-153(c)(2)(xiv), Transfers of ownership, interests, and titles in land, facilities and real and personal properties, regardless of the form or method of the transfer.® Complete disclosure of impacts was provided in the attached EA.

The sale of public lands in the Las Vegas Valley is also consistent with the intent of Congress to dispose of federal public land in the Las Vegas Valley in an orderly manner and in conformance with local land use requirements and policies under SNPLMA. The sale of these parcels is also consistent with the local government planning and through the joint selection process as identified in SN. Each parcel was reviewed and approved for disposal by local community representatives.

EPA defines an action to have a regionally significant impact if air emissions will exceed 10% of the total regional emissions budget for a criteria pollutant. The regionally significant thresholds are 17,800 tons/yr for PM10 and 12,100 tons/yr for CO based on the total budgets identified in each SIP. Estimated emissions for the development of 4800 acres of land are 3,838 tons of PM10 and 2,993 tons of CO, well below the 10% threshold set by EPA. Therefore, impacts from BLM actions are unlikely to become regionally significant. (EA page 16).

All other resource impacts as identified in the EA are considered insignificant.

A number of the parcels being offered are sites the BLM stabilized based on coordination with the Clark County Department of Air Quality Management. These parcels were identified as exceeding acceptable emission standards and BLM was required to stabilize the surface by closing access and watering the surface to form a crust, thus reducing emissions.

Mitigation Measures/Remarks:

1. The patentees will be required to comply with the Clark County Multi-Species Habitat Conservation Plan
2. The patents will be issued subject to valid and existing rights.

Authorized Official:

Date:

Mark T. Morse

Field Manager